

ATTACHMENT A

Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously presented) A wound dressing comprising:

a carrier layer having a wound-facing surface, said carrying layer comprising a polymeric material adherent to anchorage dependent cells and treated on the wound-facing surface thereof to be non-adherent to cells, said polymeric material comprising a polymer selected from a group consisting of polyhydroxyethylmethacrylic acids, cross-lined polyvinylalcohols, polyacrylic acids cross-linked with trialkylsucrose, polyvinylpyrrolidones, polyetherpolyesters, polyetherpolyamides, polyacrylamides, polyethylene oxide, polyurethanes and ethylenevinyl acetate copolymers, said surface being non-adherent to anchorage-dependent cells and having disposed thereon a biodegradable cell anchoring layer comprising a material selected from the group consisting of:

- (i) a polyanion selected from the group consisting of a heparin, an inositol phosphate, fucoidin, syndecan, betaglycan, perlecan, dextran sulphate, pentosan, mesoglycan and polyvinyl sulphate; and
- (ii) a polycation comprising a polypeptide; and

said anchoring layer having anchored thereto mammalian cells which form a cell layer comprising a material selected from the group consisting of keratinocytes and fibroblasts.

2. (Previously presented) The wound dressing of claim 1 wherein the carrier layer comprises a polymeric material adherent to anchorage dependent cells and treated on the wound facing surface thereof to be non-adherent to cells, said polymeric material comprising a polymer selected from a group consisting of polyhydroxyethylmethacrylic acids, cross-linked polyvinylalcohols, polyacrylic acids cross-linked with trialkylsucrose, polyvinylpyrrolidones, polyetherpolyesters, polyetherpolyamides, polycrylamides, polyethylene oxide, polyurethanes and ethylenevinyl acetate copolymers.

3. (Original) The wound dressing of claim 2 wherein the material is a cross-linked hydroxyalkyl cellulose, a cross-linked carboxyalkyl cellulose, a polyvinyl alcohol or an agarose.

4. (Original) The wound dressing of claim 1 wherein the carrier layer comprises a material adherent to anchorage dependent cells and treated on the wound facing surface thereof to be non-adherent to cells.

5. (Original) The wound dressing of claim 4 wherein the adherent material comprises a polymer selected from a group consisting of; polyhydroxyethylmethacrylic acids, cross-linked polyvinylalcohols, polyacrylic acids cross-linked with trialkylsucrose, polyvinylpyrrolidones, polyetherpolyesters, polyetherpolyamides, polycrylamides, polyethylene oxide, polyurethanes and ethylenevinyl acetate copolymers.

6. (Previously presented) The wound dressing of claim 1 wherein the wound facing surface is treated with a phosphocholine, a silicone, a polyethylene glycol or a polytetrafluoroethylene.

7. (Previously presented) A wound dressing according to claim 1 wherein the biodegradable cell anchoring layer comprises a polyanion moiety.

8. (Previously presented) The wound dressing of claim 1 wherein the polyanion moiety has anchored thereto a cell adhesion protein.

9. (Previously presented) The wound dressing of claim 7 wherein the polyanion is a heparin, an inositol phosphate, fucoidin, syndecan, betaglycan, perlecan, dextran sulphate, pentosan, mesoglycan or polyvinyl sulphate, and wherein said cell anchoring layer has anchored thereto mammalian cells which form a cell layer comprising either keratinocytes or fibroblasts.

10. (Previously presented) The wound dressing of claim 1 wherein the biodegradable cell anchoring layer comprises a polypeptide.

11. (Previously presented) The wound dressing of claim 1 wherein the polypeptide is polylysine.

12. Canceled.

13. Canceled.

14. (Previously presented) The wound dressing of claim 1 wherein the cell layer comprises both keratinocytes and fibroblasts.

15. (Currently amended) The wound dressing of claim 121 wherein the cell layer comprises either autologous cells or allogenic cells.

16. (Currently amended) The wound dressing of claim 121 wherein the cell layer comprises both autologous and allogenic cells.

17. (Previously presented) A cell culture system comprising:

(a) a wound dressing comprising a carrier layer having a wound-facing surface, said carrier layer comprising a polymeric material adherent to anchorage dependent cells and treated on the wound-facing surface thereof to be non-adherent to cells, said polymeric material comprising a polymer selected from a group consisting of polyhydroxyethylmethacrylic acids, cross-linked polyvinylalcohols, polyacrylic acids cross-linked with trialkylsucrose, polyvinylpyrrolidones, polyetherpolyesters, polyetherpolyamides, polyacrylamides, polyethylene oxide, polyurethanes and ethylenevinyl acetate copolymers, said surface being non-adherent to anchorage

dependent cells and having disposed thereon a biodegradable cell anchoring layer comprising a material selected from the group consisting of:

- (i) a polyanion selected from the group consisting of a heparin, an inositol phosphate, fucoidin, syndecan, betaglycan, perlecan, dextran sulphate, pentosan, mesoglycan and polyvinyl sulphate; and
- (ii) a polycation comprising a polypeptide; and

(b) a vessel having interior and exterior surfaces for containing a liquid culture medium for culturing cells and the dressing.

18. (Previously presented) A method of treating a skin trauma site on a mammalian patient comprising the step of applying to a patient a wound dressing, said dressing comprises:

- (a) a carrier layer comprising a polymeric material adherent to anchorage dependent cells and treated on a wound-facing surface thereof to be non-adherent to cells, said polymeric material comprising a polymer selected from a group consisting of polyhydroxyethylmethacrylic acids, cross-lined polyvinylalcohols, polyacrylic acids cross-linked with trialkylsucrose, polyvinylpyrrolidones, polyetherpolyesters, polyetherpolyamides, polyacrylamides, polyethylene oxide, polyurethanes and ethylenevinyl acetate copolymers, said wound-facing surface being non-adherent to anchorage dependent cells and having disposed thereon a biodegradable cell anchoring layer comprising a material selected from the group consisting of:

- (i) a polyanion selected from the group consisting of a heparin, an inositol phosphate, fucoidin, syndecan, betaglycan, perlecan, dextran sulphate, pentosan, mesoglycan and polyvinyl sulphate; and
- (ii) a polycation comprising a polypeptide; and

(b) a layer of mammalian cells comprising a material selected from the group consisting of keratinocytes and fibroblasts anchored to the anchoring layer.

19. (Previously presented) A method of preparing a wound dressing comprising the steps of:

(a) obtaining a surface which is non-adherent to the anchorage dependent cells on a wound facing surface of a carrier layer which comprises a polymeric material adherent to anchorage dependent cells and treated on the wound-facing surface thereof to be non-adherent to cells, said polymeric material comprising a polymer selected from a group consisting of polyhydroxyethylmethacrylic acids, cross-lined polyvinylalcohols, polyacrylic acids cross-linked with trialkylsucrose, polyvinylpyrrolidones, polyetherpolyesters, polyetherpolyamides, polyacrylamides, polyethylene oxide, polyurethanes and ethylenevinyl acetate copolymers;

(b) forming a biodegradable cell anchoring layer on a non-adherent to anchorage dependent cells surface of a carrier layer, said anchoring layer comprising a material selected from the group consisting of:

- (i) a polyanion selected from the group consisting of a heparin, an inositol phosphate, fucoidin, syndecan, betaglycan, perlecan,

dextran sulphate, pentosan, mesoglycan and polyvinyl sulphate;

and

(ii) a polycation comprising a polypeptide; and

(c) culturing a carrier layer which comprises a non-adherent to anchorage dependent cell surface and biodegradable cell anchoring layer in the presence of mammalian cells comprising a material selected from the group consisting of keratinocytes and fibroblasts.